

Method and Apparatus for Coupling an ATM Communication Layer to a Plurality of Time-Division Multiplex Communication Terminals

A method for coupling an ATM communication layer to a plurality of N

mutually time-independent time-division multiplex communication terminals having an overall payload cell rate CR_N , which involves the steps: generating a control signal sequence with a clock rate corresponding to the overall payload cell rate CR_N of the N time-division multiplex communication terminals, whereby the control signals can represent a first or a second status; offering a fixed data pattern; transmitting the ATM cells coming from the ATM communication layer into an ATM cell waiting list; transmitting, on demand, an ATM cell from the ATM waiting list to the requesting time-division multiplex communication terminal when the respectively oldest control signal of the control signal sequence represents the first status, and transmitting the fixed data pattern to the requesting time-division multiplex communication terminal when the oldest control signal of the control signal sequence represents the second status; and deleting the oldest control signal of the control signal sequence. The method enables a frictionless coupling of an ATM communication layer having a plurality of mutually independent time-division multiplex communication terminals, whereby variable data rates (burst behavior) of the ATM layer as well as of the time-division multiplex communication terminals can be decoupled from one another and good cell delay variation (CDV) properties can be assured.

~~Figure 1~~